

**Florida Keys National Marine Sanctuary Advisory Council**

**April 16, 2002  
Marathon Garden Club**

**FINAL MINUTES**

**MEMBERS PRESENT**

Wayne Blevins	Don Kincaid
Thomas Davidson	Nancy Klingener
Todd Firm	Karen Lee
Richard Grathwohl	Duncan Mathewson
Debra Harrison	Martin Moe
David Hawtof	Ken Nedimyer
Jack Hildreth	George Neugent
Tony Iarocci	Anita Schwessinger
	Deborah Shaw

**ALTERNATES PRESENT**

Greg DiDomenico  
Bryant Diersing  
Jerome Lorenz  
Sheila Mullins  
Jody Thomas

**Call to Order**

Chair Neugent called the meeting to order at 9:11 a.m.

**Welcoming Remarks**

Chair Neugent welcomed Jack Hildreth, Sanctuary Advisory Council member, Kacky Andrews of Florida Department of Environmental Protection, Roy Crabtree of Fish and Wildlife Conservation Commission, and Robbie Robinson, FKNMS, Lower Region. He also welcomed Gary Mackie and Mark Robson, Regional Director of the Fish and Wildlife Conservation Commission.

**Approval of Minutes/Adoption of Agenda**

On Motion by Tony Iarocci, seconded by Thomas Davidson, the Minutes of the February 19, 2002 meeting were approved as presented. On Motion by Chair Neugent, seconded by Don Kincaid, the meeting agenda was adopted as presented.

**Introduction**

June Cradick introduced Fiona Wilmot, the new Sanctuary Advisory Council Liaison. She can be reached at (305) 743-2437 ext. 27 or at [Fiona.Wilmot@noaa.gov](mailto:Fiona.Wilmot@noaa.gov).

**An Update on the NMFS Response to SAC Recommendations Regarding Marine Mammal Strandings in the Florida Keys National Marine Sanctuary – Joanne Delaney (NOAA)**

Joanne Delaney briefed the SAC on the history of their involvement with the marine mammal stranding issue, including recommendations made by SAC members stemming from a January 17, 2002 meeting forwarded to National Marine Fisheries Service Administrator, Dr. Bill Hogarth by Superintendent Billy Causey, and the informal NMFS response to those recommendations, all detailed in the information package provided to members. Wayne Blevins raised the question of a time-line and Billy Causey said that he has been communicating directly with Bill Hogarth on the matter which requires clearance from NMFS attorneys before a formal memorandum is sent to the SAC chair. Sheila Mullins requested that the effects of noise on marine life be considered as a subject for a future meeting. Joanne Delaney noted that before the SAC becomes involved, this issue is being considered at a national level.

**Stranded Cetacean Rehabilitation and Release in Monroe County – George Neugent (BOCC)**

George Neugent distributed a copy of a resolution prepared by Russ Rector of the Dolphin Freedom Foundation for the Monroe County Board of County Commissioners regarding the release of rehabilitated dolphins and whales rescued in the waters of Monroe County and/or the boundaries of the Florida Keys National Marine Sanctuary. Commissioner Neugent requested that the SAC review the proposal and advise the BOCC of the implications of adopting the resolution. Debra Harrison moved that the subject be put on the agenda for the June meeting to allow time to analyze the information, and Deborah Shaw seconded the motion.

**Award Presentation**

Billy Causey invited the new co-trustee partner with the State of Florida, Katherine Andrews, to join him in recognizing Joanne Delaney as the Outstanding Member of the Florida Keys National Marine Sanctuary for the Year 2002.

**Public Comment**

Russ Rector of the Dolphin Freedom Foundation thanked Council members for their contribution in making recommendations at the January 17, 2002 meeting which resulted in changes to the stranding network in place in the Florida Keys. He noted that there are now two Letters of Agreement holders comprising a northern and a southern stranding response team, separated by the Seven Mile Bridge. He cited a recent stranding at Grassy Key as an instance of continued communications problems between NMFS and local responders and suggested that the Marine Patrol might act as dispatcher rather than the NMFS coordinator in Miami, giving details of how this might be effected. Mr. Rector described the intent behind the resolution presented to the BOCC as ensuring that a dolphin or whale that strands and is rescued and rehabilitated in Monroe County is released at the stranding site and not sent to captive facilities. In the event of an animal being unfit for release, he suggested the formation of a review board with members

drawn from the Commission, Council, local veterinarians and a representative from NMFS.

Bill Niepoth representing the Islamorada Charter Boat Association read the attached letter from Captain Steve Leopold, President of the Association, regarding the importance to the charter boat industry of ballyhoo fishing in Sanctuary Preservation Areas. He asked that the Sanctuary allow the use of hair hooking for ballyhoo also be allowed in SPAs when weather conditions preclude cast netting. He further suggested limited entry for the fishery as well as catch limits to prevent depletion of the fishery. Wayne Blevins asked if hair hooking poses a threat to birds and was assured that it does not. Tony Iarocci and Martin Moe expressed concern that other anglers may misinterpret hair hooking for ordinary fishing.

George Scott, a long-time resident of Tavernier, described his experiences lobster fishing from the early 1960s to the present, and observed that the fishery has gone from abundance to absence in the intervening years. He proposed that the sport divers season coincides with the egg-bearing season for lobster and should be later in the year, and of shorter duration. He also suggested a bag limit for recreational fishermen as a means of conserving fish stocks. Billy Causey observed that although the SAC does not typically engage in fisheries management issues, that both John Hunt and Roy Crabtree of FWCC are present at the meeting, and that this is of concern to them.

#### **Sanctuary Superintendent's Report – Billy Causey (NOAA)**

Billy Causey mentioned that Ivy Kelley will be acting education coordinator while Mary Tagliareni is on maternity leave and that Patti Hartsing is absent for the same reason until July. He announced with pride that the Upper Keys Regional Manager was promoted on April 1, 2002 and is now Lieutenant Commander Dave Score. He noted that after three years of contract work with the Sanctuary, the program specialist for research and information technology and also webmaster for the Sanctuary, Ben Richards, is now a full-time NOAA employee. In addition, Brenda Altmeier is joining the federal agency from the state side after nine years of providing administrative assistance, particularly through permitting, first with the Key Largo National Marine Sanctuary, and now FKNMS. Mr. Causey welcomed Captain Jayson Horadam back to the Sanctuary in his new capacity as Captain of the Sanctuary detachment, and noted his prior contributions as a Key Largo Sanctuary enforcement officer, later with Florida Marine Patrol. In other Sanctuary news, he reported on a symposium that he attended at the American Museum of Natural History in New York, on the annual National Marine Sanctuary Program Managers Meeting, and on a meeting of the Central California Fishermen's Forum that he attended with Tony Iarocci at the invitation of Save Our Shores, funded by the Packard Foundation. He thanked Tom Davidson for hosting a Sanctuary Friends event at Ocean Reef on March 5, 2002, with special guests Jean-Michel Cousteau and Lori Arguelles from the National Marine Sanctuary Foundation. Commissioner George Neugent is the recently elected Chair of the Sanctuary Friends, Tom Davidson is the Vice-Chair and Fran Decker is the Secretary/Treasurer. Mr. Causey commented on restoration work being undertaken by Harold Hudson at Cheeca Rocks; reported on the Water Quality Protection Program Steering Committee workshop and meeting in early April, draft

minutes attached. He discussed the details of the Sanctuary's precautionary permit requirements for the Spiegel Grove; made note of visitors to the Sanctuary; gave an update on progress at the Foster Center; announced that Scott Gudes, Assistant Deputy Secretary for NOAA will make two environmental hero awards on April 21, 2002, one to George Humell of Islamorada and one to Fran Ford of Key West.

**Florida Department of Environmental Protection Report – Katherine Andrews (FDEP)**

Kathy Andrews introduced herself as a native Floridian, with a degree in economics from the University of Florida, and a masters in natural resources law from the University of Lewis and Clark, Oregon. She has previously worked with the Florida Chapter of The Nature Conservancy. She said that FDEP is setting up a Coastal Reserve System in the state, loosely modeled on the Sanctuary and on the National Estuaries Research System, to promote conservation of resources. In addition, a coastal training institute for Florida's leaders to guide informed decision-making is to be opened at Rookery Bay, Naples. Ms. Andrews indicated that FDEP is going to review water quality monitoring matters throughout the state, with a view identifying and closing gaps in the system. She said that the five year Management Plan will go before the Governor and Cabinet sometime this summer. She concluded by congratulating the Boca Chica Marina for its designation as the fifth Clean Marina in state waters and saying that she looked forward to working with the Council.

**Sanctuary Enforcement Report – Captain Jayson Horadam (FWC)**

Capt. Horadam said that he is glad to be back with the Sanctuary after 12 exciting years doing transects with the marine patrol in Miami. He announced the new positions on the Sanctuary enforcement team, with four new officers; one to be assigned to the Upper Keys squad, one to the Lower Keys squad and a Lieutenant on each of the 82 ft. cutters, the Point Monroe and the Point Rovers. He said that after additional crew training the Monroe will be ready to join the 41 ft enforcement vessel in patrolling the Tortugas reserve. In addition to the regular patrols of inshore areas, there will be a fully equipped 30 ft. Mako patrol vessel. Capt. Horadam clarified for Ms. Mullins that there is only one position left to fill.

**Florida Fish and Wildlife Conservation Commission Report – John Hunt (FWC)**

John Hunt reported that the Commissioners have appointed Ken Haddad, Director of FMRI as the new Executive Director to replace Dr. Egbert, starting in May in Tallahassee. He said that after the final public hearing on sponges was held at the last Commission meeting, the Commissioners approved an increase in the minimum size to 5" diameter across the top, established a recreational bag limit, and that the sponge endorsement will go into effect July 1, 2002. He introduced Bill Sharp of FMRI to report on some urchin observations in the North West Channel, and distributed copies of the relevant Bay Watch Report.

Bill Sharp said that Ken Nedimyer observed an unusual abundance of *Lytechinus variegatus* in the North West Channel and, concerned that this same species overgrazed patches of seagrass in Florida Bay in 1997-8, notified FMRI which undertook a

preliminary assessment at the appropriate coordinates. Using belt transects they found the urchins, at half an urchin per square meter, to be a little more abundant than usual for hard bottom areas, but that this is consistent with the life history for this species, characterized by highly sporadic, localized recruitment of juveniles to the benthic habitat. Periodic monitoring of the manatee seagrass bed north of Marathon that was heavily overgrazed in 1997-8 has shown a return to ambient densities of about one urchin every 10 square meters, and that experimental density manipulations in turtle grass show little damage to seagrass biomass until the density reaches 10 urchins per square meter. He noted that sea urchins live only about three to five years and that the Marathon aggregation probably represents one extraordinary recruiting cohort that is now mostly dead. Mr. Iarocci acknowledged the cooperation between Mr. Nedimyer and the state agency, and regretted that some commercial fishermen with interests in urchin overgrazing could not attend the meeting. Mr. Sharp recalled that in August crab fishermen gave him accurate coordinates to the west of the overgrazed area and that localized densities of 101 urchins per square meter were observed in barren halos in the seagrass, but that by February the grass had recovered and there were multiple dead shells in the area. Anita Schwessinger asked if the seagrass recovers, and Bill Sharp replied that some signs of successional recovery are taking place, with *Halodule* and *Thalassia* appearing before *Syringodium*. Mr. Nedimyer observed that the effects of urchin grazing on seagrass beds and hard bottom areas are quite different, and that perhaps in hard bottom areas *Lytechinus* is taking over the algae-cleaning niche previously occupied by *Diadema*, which is beneficial for coral recruitment. Mr. Hunt expressed an interest in continuing to monitor urchin effects in collaboration with interested parties, despite lack of formal funding for such projects. Mr. Causey added that despite the densities of up to 300 urchins per square meter in 1997-8, and pressure to remove the urchins, time has proven that natural phenomenon such as this are best left to run their natural course.

#### **Status Report on “blackwater event” – John Hunt (FWC)**

Billy Causey outlined the sequence of events that led from initial reporting of a blackwater event off the Florida Keys by a Naples journalist in March to a multi-agency, multi-organization attempt to piece together from a variety of sources the development and progress of the event.

John Hunt distributed copies of *The Plume* and *The Bloom*, a Bay Watch report authored by Jennifer Jurado of the University of Miami, and noted that all the collective science managers and agencies that have funded different aspects of the Florida Bay Science Program through research and monitoring have enabled scientists to understand the event and put it into perspective. He gave a PowerPoint presentation showing the development of a patch of optically black water off the coast of western Florida at the end of November, early December, visible by Lotus satellite, attributable to a red tide, coincident with a bloom of water characterized by high levels of tannins and humic acids. Regular monitoring showed in the same area the highest levels of chlorophyll present in the region for some time, coupled with a high salinity gradient, indicative of a freshwater pulse from the mainland. He explained that at the end of the rainy season in December the highest concentrations of silicates, an essential nutrient for diatoms that comes from

eroded rocks, are available for uptake by the diatom *Rhizosolenia*, causing a localized bloom. This naturally occurring annual bloom was made extraordinary by admixing of the remains of the red tide, contributing additional nutrients. A drifter track released in the center of the bloom in February showed an atypically slow meander to the west and north, accounting for the longevity and stationary nature of the event. He said that in addition to regular monitoring, various groups and agencies have been collecting and analyzing water samples for both organic and inorganic indicators, which show the bloom to be senescing, and that benthic effects have been recorded in the Keys by Ken Nedimyer, Don DeMaria and sponge biologist Niels Lindquist. He concluded with the caution that the sponge die-off is probably a result of the diatom bloom dying, but that there is no scientific evidence to corroborate this observation. Richard Grathwohl, Sheila Mullins and Martin Moe asked questions concerning linkage between human-induced, land-based practices and harmful algal blooms, and were told that while there is no smoking gun in this particular event, Karen Steidinger, an international expert on red tides with the State of Florida, is working towards trying to determine if there is some global change of red tides in terms of frequency, virulence, aerial extent and see if there is an anthropogenic connection. Mr. Iarocci spoke of concerns felt by commercial fishermen with regard to the effects of habitat degradation on the future of the fishery and expressed frustration at the lack of research funding for cause and effect studies in Florida Bay. Mr. Causey stressed the importance of returning to a more natural flow of water out of the Everglades and into Florida Bay through the Comprehensive Everglades Restoration Plan.

**Photographic record of selective benthic die-off in the wake of the recent “blackwater” event – Ken Nedimyer (Tropical Fish Collector)**

Ken Nedimyer gave an illustrated description of his observations from within the “blackwater” in the North West Channel and north of Bahia Honda, commencing with a control exposure of typical channel communities in the Lower Keys prior to March 2002. He showed multiple exposures of dead ‘rope’ sponges of several species from the end of March, and noted that sponges disintegrate rapidly on dying. As well as dead and dying sponges, he illustrated many instances of dead and dying corals, particularly brain corals. Although *Montastraea cavernosa* appears to be unaffected, *Porites astreoides* appears covered with a white scaly substance, as in the grass flats north of Bahia Honda do *Porites porites*. He observed that visibility was so low that he had difficulty obtaining pictures and on one occasion, in a thoroughly familiar area, became temporarily lost, when weather conditions indicated that the water should be clear for the time of year and not green and ‘soup-like’. He reiterated the selective effects of the event, and observed that some animals like fish and starfish are absent altogether from the affected water, which extends out to the reef line. Chair Neugent and Mr. Iarocci thanked Mr. Nedimyer for keeping the Council, the agencies and both the diving and commercial fish industry informed on a regular basis of his observations throughout the Keys. Don Kincaid observed that a heavy green filter will block all light from above and make everything underneath appear black. Wayne Blevins and Martin Moe asked what the “scaly white stuff” is and although Mr. Nedimyer did not know, Mr. Hunt suggested sampling and analysis may provide the answer.

**Panel Presentation: The Sustainability of the Ballyhoo Fishery in Monroe County  
Introduction – John Hunt (FWC)**

John Hunt introduced Rich McBride and Roy Crabtree who had provided Mr. Hunt with material to present during the February meeting.

**Halfbeak Biology and Natural History – Dr. Richard McBride (FMRI)**

Rich McBride thanked the Council for inviting his participation in the forum, and distributed two of his published papers on the fishery and the biology of *Hemiramphus brasiliensis* or ballyhoo, and *H. balao* or balao. He noted that the historic fishery is above reefs in the upper water column, distributed from Palm Beach County down to the Marquesas with >50% of trips from the Miami/Upper Keys region and about 25% from Florida Bay area, with 10-15% in the Lower Keys primarily when fishermen come down from other areas, and that boat size limits the number of boxes that can be carried on a day trip. The main gear used is a lampara net, whose scope can be increased by adding rope, but whose depth is limited to 8 ft.; and the fishery is regulated to report landings to the Florida Marine Fishery Information System through the trip ticket system; approximately 1.2 million pounds of baitfish are landed annually in South Florida. The fish are layered in a briny ice solution on the boat, hand sorted, graded, rigged up, vacuum packed and flash frozen, making them a high-end product for use in the game fish industry. He reviewed the decline in trips over a 15 year period, though the catch remains stable, and considered contributory variables like weather, the economy and pressure from outside markets, as well as increase in boat size. Dr. McBride referred to the recreational fishery, with its different methods of capture, as being more decentralized and not as rigorous in the collection of catch statistics, and summarized the commercial fishery as small but valuable to the State of Florida. He characterized halfbeaks as short-lived, fast-growing, early summer spawning fish with low batch fecundity and a spawning range along the entire reef with populations on both sides of the Atlantic. There is some scientific data to indicate that juveniles appear in the north and move south in the winter, with an egg period of up to nine days, and no real planktonic stage before they achieve a reasonable existence. He clarified for Mr. DiDomenico that as a forage fish, a mortality rate of 99% in the first year is not unusual, though there is no data specifically separating fishing mortality and captive mortality, and that the oldest recorded specimen of a ballyhoo is four years, based on otolith growth bands. Further discussion centered on the impact of the recreational catch, with the most comprehensive data coming from charter boat captains holding Sanctuary permits for fishing in SPAs.

**Issues in Fisheries Management – Dr. Roy Crabtree (FWC)**

Roy Crabtree presented a list of the commercial industry proposals submitted to the FWC, and informed the Council of past and upcoming meetings that will deal with the ballyhoo issue, particularly a meeting in Hawks Cay in November 2003. He summarized the fishery as stable, with a high natural mortality rate that is not partitioned between natural mortality and fishing mortality, though indicative of heavy fishing pressure, but there is not a precise enough stock assessment yet to make a judgment for whether the stock is being over fished or not. He said that in the absence of further information, due to lack of resources, the contingency plan proposed by the commercial industry is trip limits of between 8-15 boxes per vessel per day, and endorsements to limit entry into the fishery, either through the mechanism of a lampara net endorsement or a ballyhoo

endorsement at a cost of \$100. The FWC has the authority to establish endorsements but only the legislature can establish a fee to go with the endorsement and this does not look likely under current circumstances. An alternative which is typical of federal fishery management but not in state management other than lobster tags, is to make the permits transferable, and that the initial condition for receiving a permit is a certain level of landings in past years. He mentioned that a number of people are uncomfortable with moratoria and closed fisheries. Additionally, the commercial fishermen have asked for a recreational bag limit, which is problematic as the data are spotty. Dr Crabtree concluded by saying that the fishery needs to be stabilized, a stock assessment to determine the status of the fishery needs to be undertaken and that a workshop is being held in the summer to discuss more specific proposals before taking the ballyhoo issue before the Commission in the fall. Chair Neugent stressed the urgency, in the face of a rapidly growing population in Florida, of taking pro-active measures such as limited entry, to protect fisheries from over-exploitation. Dr. Crabtree clarified that most commercial fisheries in Florida are under limited entry, with the exception of the small ballyhoo fishery and that all reef fish are under a federal moratorium. Ms. Shaw and Ms. Harrison expressed concern about fishing within Sanctuary Protected Areas. Mr. Causey explained that within the State of Florida, the Sanctuary conforms with state and federal agencies to a consistent fishery protocol, but that the Sanctuary Advisory Council can make recommendations to Sanctuary supervisors who will pass those recommendations on to the appropriate authorities, even though the matter is still at an information gathering stage. He added that the Sanctuary does collect data on the recreational fishery through its permits for fishing in SPAs. Ms. Mullins asked if there has been discussion about halting fishing during the peak spawning season and was informed that there has. Mr. Blevins argued the case for limited entry as a mechanism for gauging the number of fish in the stock, which is essential to understand the fishery. Dr Crabtree reiterated that the number of trips are down and that the catch has remained fairly constant, unlike other fisheries, and that limiting effort is not a precondition for conducting a stock assessment. Further discussion centered on the need for more information to make projections into the future, the stability of effort in charter boat fisheries, and the anecdotal nature of the data collected by the Sanctuary through its permits.

## **Question and Answer Panel Session with Commercial Fishermen**

### **Introduction – Tony Iarocci**

Tony Iarocci commented it was the commercial fishermen who initiated the process of trying to stabilize the fishery and introduced the following panel:

**Commercial fishermen: George Niles, Kevin Goodwin, John Dougherty, Keith Daniels, Rick Hill, Patrick Lynch.**

**Charter fishermen: Bill Heath, Rich Helmuth.**

**Processor: Robert Palma.**

**Also: Bill Niepoth and Richard van Munster.**

Mr. Iarocci showed two videos of the fishermen catching ballyhoo with lampara nets.

Mr. Goodwin took questions from the Council and said that fishermen are in favor of box limits and limited entry to the fishery; there are about a dozen boats involved in the fishery and that the upper limit for boxes is to accommodate a few slightly larger boats in the fleet.

Mr. Lynch said that there are ballyhoo fisheries in Nicaragua, Mexico and Venezuela that supply the East Coast from the Carolinas up to Maine and that demand exceeds supply.

Mr. Daniels observed that he has heard of ballyhoo stocks present on the West Coast of Florida from Ft. Myers north between April and September.

Mr. Niles responded to a question about the number of boxes that different models of boats can carry. He said that most 30 ft. boats can carry at least eight boxes and that larger boats are difficult to maneuver in windy conditions, especially when crab and lobster traps are present. Individual fishermen then gave the number of traps they could carry, ranging from five to fifteen.

Mr. Goodwin said that the ballyhoo migrate south in the winter and that fishermen try to avoid SPAs as there are user conflicts with dive boat charters. Mr. Causey interjected that the reason fishermen are allowed permits for SPAs is to legalize the situation if they drift into the SPAs, not so that they can strike in them.

Mr. Lynch confirmed that a prohibition on ballyhoo fishing in SPAs would increase pressure elsewhere and that size dictates market price, as well as scarcity and that fish are frozen when they are abundant for local use in the lean months.

Mr. Heath, in response to a question concerning copy-cat fishing in SPAs if charter boat captains are allowed to use the hair hook method, said that it is useful only when the ballyhoo are present in the SPAs and that it is a question of educating the public.

Mr. Hill explained that ballyhoo move around and are not predictable, which is why the hair hook method is necessary as well as cast netting.

Ms. Harrison distinguished between two areas of concern to Council members.

- 1) whether the fishery is sustainable
- 2) whether there is enough scientific evidence to justify taking fish in SPAs

Mr. Lynch explained that the fishery does no damage to Sanctuary resources and that there is no by-catch. Mr. Causey added that hair hooking is not permitted in SPAs because it does give a false impression and lead to conflict.

Mr. Helmuth said that mooring buoys around SPAs are more of a hindrance than a help and that hair hooking as opposed to cast netting reduces damage to the ballyhoo and also time spent in the SPAs.

Mr. Goodwin answered a question about the percentage of frozen bait that leaves the state and said it is around 10% and that the frozen ballyhoo is used for dolphin fishing after April when the ballyhoo are gone from the area.

Discussion revealed that ballyhoo typically only congregate on high points of the reef, which coincide with SPAs, in large enough numbers to make netting worthwhile; that the traditional fishery does not use rope with the nets, which increases the size of the catch; mis-use of permits in SPAs is not normal; that the fishery is small and is composed of a stable group of fishermen.

Mr. Iarocci and Chair Neugent thanked all the panelists for the information that they shared with Council members.

Council members discussed with Sanctuary managers and Dr. Crabtree the reasons for allowing ballyhoo fishing in SPAs, the need for a limited entry to the fishery and the ecological impact of extracting a resource from the SPAs.

Karen Lee moved that the Sanctuary Advisory Council recommend to the Sanctuary Managers that they work with National Marine Fisheries and the State of Florida to investigate the enactment of regulations to provide for limited entry into the commercial ballyhoo fishery and also to limit the number of boxes to be permitted on those licensed commercial ballyhoo fishermen.

Debra Harrison seconded the Motion and added a friendly amendment to include in the recommendation that recreational bag limits be added and Ms. Lee accepted the amendment. After discussion concerning quotas, the Motion was unanimously adopted as presented on roll call vote.

Ms. Harrison moved that the Sanctuary Advisory Council develop a committee to work with members of both the commercial and recreational interests and with the staff scientists to look at where the fishing is currently occurring, what areas are critical, and all the various components, and make recommendations back to the SAC for consideration by the five year management plan that would mean that new regulations would be created.

Mr. Iarocci seconded the motion and it was unanimously adopted on voice vote.

### **Agenda change**

Chair Neugent announced a change of order in the agenda, with Dr. Kruczynski's presentation following the Oil Spill panel.

### **Public Comment**

H.T. Pontin presented copies of letters from Warren Johnson of the Key West Propeller Club to be entered into the record. He made brief comments on the state of fishing in Florida.

## **Panel Presentation: Oil Spill Contingency Plans in the Florida Keys**

### **Introduction – Fritz Wettstein (FDEP)**

Fritz Wettstein acknowledged Ms. Shaw's request for the panel, which has been assembled by Lisa Gordon, the Emergency Response Coordinator for FDEP, and distributed copies of the Water Quality Action Plan Progress Report. This report demonstrates the hazardous material response contained within the Sanctuary management plan, from reporting, through coordination with other agencies, to response. He introduced Ms. Gordon, who has been with the State of Florida for 17 years with experience in several capacities including enforcement, public health, domestic waste, hazardous waste, solid waste and storage tanks.

Lisa Gordon introduced Captain James Watson IV, Commanding Officer and Captain of the Port for the U.S. Coast Guard Marine Safety Office in Miami and presented the attached biography, accompanied by Lieutenant Scott Higman, the Supervisor of the Marine Safety Detachment for the U.S. Coast Guard in Marathon, whose biography is also attached.

Captain Watson thanked the Council for the invitation to present the Coast Guard's scope of responsibility in the event of an environmental emergency in the Florida Keys. He described himself as the Federal On-Scene Coordinator for the coastal zone stretching from Ft. Pierce to the Dry Tortugas, including the 200 mile U.S. Exclusive Economic Zone, with a chain of command that includes Brad Benggio of NOAA in Miami, and Lt. Higman in Marathon. He listed other resources available in the case of a disaster, including the National Strike Force, with air assets, and the Department of Defense. He mentioned the Area Contingency Plan, as well as a continuous program of exercises for worst-case scenario oil spill, particularly an exercise at the Turkey Point Power Plant, although he said that the largest and most expensive spill in his first year has been the grounding of the Theresa Lynn and Blind Faith shrimp boats in the Dry Tortugas.

Lieutenant Higman described the circumstances of the grounding at Fort Jefferson and the Coast Guard response, which involved a helicopter survey, hire of a contractor from Miami, and the removal of the diesel fuel, as well as the old wooden hulls, with a cost of \$1.2 million for the operation, which was coordinated by a National Strike Team Force of three members from Mobile, AL.

Capt. Watson mentioned the billion-dollar oil spill liability trust fund that was created after the Exxon Valdez spill, which is maintained through levying a tax on barrels of oil and is managed by the Coast Guard. He said it is always available to reimburse expenses incurred in a response in the Sanctuary. In addition, he spoke of the Stafford Fund, the Federal Response Plan Fund, which is activated by the declaration of an emergency by the Governor and President after an Act of God, such as a hurricane, rather than a mariner mistake. He concluded by saying that the mechanisms for all types of response are detailed in the Area Contingency Plan, with all the strategies, staging sites, disposal sites, logistics and chains of command, as well as funding in the guidelines. Dr. Hawtof asked for further details on the shrimp vessel grounding and Lt. Higman supplied them. Ms. Mullins asked about an initiative to put resources in place within the Sanctuary, rather

than wait for a contractor from Miami at great cost. Capt. Watson responded that any entity that has equipment, and its use is planned for in the Area Contingency Plan, will be compensated for that use under the Incident Command System using the relevant funds, depending on the cause of the spill. Lt. Higman mentioned that a number of states maintain fully stocked, ready-response vessels. Ms. Shaw commented that her request from this panel came from her responsibility for a tank farm with her employer, an electric utility, and that in the case of a hurricane the majority of workers are restoring lost power and unable to respond to a breached tank farm, and that she is pleased that there is financial assistance available as well as outside manpower. Capt. Wilson clarified that the Coast Guard, with limited local resources, relies on contractors and out-of-state responders. Chair Neugent confirmed that in the event of a major spill, local authorities will solicit outside assistance. Ms. Shaw asked if large vessels are required to carry response equipment and was informed by Capt. Watson that they are required to have a contingency plan and a certificate of responsibility to pay for clean-up but not to carry equipment or crews trained to use response equipment. Mr. Firm asked about the role of the marine Spill Response Corporation in the Area Contingency Plan. Capt. Watson explained that it is funded by the large oil companies in the case of enormous spills, post-Valdez, and is not available to cruise ships, power plants or similar entities, unless specifically engaged by the Federal On-Scene Coordinator, and paid for out of liability funds. Mr. Causey observed that although NOAA and the Coast Guard cooperate in an emergency, their roles are distinct, with the Coast Guard focusing on the vessel and the spill, and NOAA trustees concentrating on damage to marine resources. Both Capt. Watson and Mr. Causey noted the involvement of state agencies, as well as other federal agencies, at an early stage in emergency responses.

Lisa Gordon, who represents the Bureau of Emergency Response in Marathon for the Florida Department of Environmental Protection, presented the attached Power Point report. Mr. Blevins asked if it is correct to pour detergent on a small diesel spill, or, as he prefers, to let it dissipate on its own. Ms. Gordon clarified that soap is a dispersant which requires approval from the Regional Response Team to disperse an oil spill, and an infraction can result in a fine greater than \$25,000 from the Coast Guard. Lt. Higman confirmed that this is the case, as knowingly trying to cover up an oil spill is a criminal activity. He said he prefers to educate boaters using the Coast Guard Auxiliary for at least a year before resorting to enforcement, with informational materials like the brochure "Don't put Dawn on the Water". Ms. Shaw added that cleaning oiled seabirds with soap can cause hemolytic anemia and subsequent death. Ms. Gordon indicated that sorbent materials are the preferred method for cleaning up a small spill, over expensive biological agents which, although permitted under state law, are prohibited under federal law. Ms. Mullins asked if the designation of 10,000 gallons as a minor spill is not too large for an area of State Critical Concern like the Keys. Capt. Watson explained that it is to allow the Federal On-Scene Coordinator to establish priorities in the event of coincidental emergencies, enabling him to leave 10,000 gallons of oil in the water if there is a concomitant terrorist attack. Ms. Mullins asked about the response plans for a massive seabird oiling event, and members of the panel concurred that it is all detailed in the Area Contingency Plan. Further discussion between the panel and Council members

concerned the amount of time allowed to a responsible party to effect a clean-up, and the exclusion of hazardous materials from cruise ship gray water.

Ms. Gordon introduced Henry Norris as the Program Administrator for the Information, Science and Management Section at Fish and Wildlife Conservation Commission's Florida Marine Research Institute. His biography is attached.

Henry Norris, the State Scientific Coordinator, thanked Ms. Gordon for her introduction and the Council for inviting him to explain some of the information products being developed by FMRI, namely the South Florida Area Contingency Plan, and the history of how the process was initiated by governor Martinez in 1990, to evaluate the State's responses and capabilities. He said that FMRI, with extensive mapping expertise, was given the task of updating and automating six spill support atlases covering the entire state shoreline and St. John's River, that had been developed by NOAA in the 1970s, and that to do so they employed the state GIS using three primary data types – shoreline habitat, sensitive biological resources and human-use resources. The entire shoreline is thus classified using this detailed data according to sensitivities to oiling, enabling the Coast Guard to develop protection strategies in a crisis situation. He explained that a GIS is a computer mapping application designed for any disaster, whether oil spill or hurricane, which builds maps from lists of data, and that the Florida Marine Spill Announcement System (FMSAS) is a component of that application. It is digitized and platform independent, although primarily designed for PCs, it can be run under Unix, Linux or MAX, and is installed at each of the bureau-administered field offices, as well as the Coast Guard who are able to modify it. He said that since the Tampa oil spill, it has become not only portable, but capable of accommodating very complex vessel and spill tracks, and has powerful search tools as well as extensive embedded web-links. Mr. Norris observed that all the metadata for South Florida, as is the case for the Tampa area, will be available on the Web by July, 2002 and is scheduled to be updated every three to five years. He provided copies of the CD to all interested members of the Council.

Ms. Gordon introduced the Federal Scientific Support Coordinator with NOAA, Lt.Cdr. Bradford Benggio, for Florida and the Caribbean Region, based in Miami. His biography is attached.

Brad Benggio introduced himself as a NOAA employee of the Hazardous Materials Response and Assessment Division for Coast Guard District 7, which covers Florida, the Caribbean with Puerto Rico and the U.S. Virgin Islands, as well as Georgia and South Carolina. He explained that under the National Response System, he works for six Captains-of-the-Ports and comes in as support for the Federal On-Site Coordinator on scientific coordination for response decisions. He described the role of Scientific Support Coordinator as addressing four questions regarding a spill – what kind of a spill, where it is going, when it is going to hit and what is to be done about it, in conjunction with other trustees and other members of the scientific community at local and on regional and national levels. He noted that in recent years the spill rate and size have gone down, but that preparedness has increased, and distributed a recent training manual from a workshop for the response community in South Florida, on oiling in tropical

environments that was held in Key West in June, 2000. Lt. Cdr. Benggio announced that there will be a two-day workshop in August in the Keys on the use of dispersants as a counter-measure tool. He gave details of two of the most informative web sites, both provided by NOAA, for oil spill information and spill response information, and they are <http://RESPONSE.RESTORATION@NOAA.gov>, with a program called ADIOS – Automated Data Inquiry on Oil Spills which can be downloaded and used to model spills, and [www.incidentnews.gov](http://www.incidentnews.gov) which is an active website that NOAA maintains on major spill responses.

Ms. Gordon introduced Edward Garcia, the Environmental and Safety Officer for the utility board of the City of Key West. His biography is attached.

Eddie Garcia thanked the Council for the invitation to present information on the precautions taken by the Keys Energy Service, lately called City Electric System, to prevent a spill of close to three million gallons of No.2 light diesel fuel maintained in their facility on Stock Island close to sensitive mangrove habitat. He said that the fuel-lines are double-contained and all the tanks, pipe-lines and docks are checked around the clock, and that in the event of a disaster such as a hurricane, there is a boat on davits which can be in the water in five minutes, with onboard equipment that includes a fully absorbent response boom. In addition, there is a contractor in Miami, who can be in the Keys within hours to assist the eighteen trained response personnel on staff, although Mr. Garcia noted that in the event of a power outage, restoring power is the primary staff responsibility. He noted that the utility company coordinates with DEP on both the land and water side, and with NOAA on the water side, and that it is fully prepared to respond to an emergency. Ms. Shaw observed that the majority of spills responded to by contractors in the Keys come from small boats. Lt. Higman added that in the changed circumstances since September 11, 2001, the Coast Guard now has the added function of providing security to thousands of people aboard cruise ships, amongst other things, and that other state and federal authorities can initiate an oils spill response instead, particularly if it is to a small spill.

Ms. Gordon introduced Cliff Berry III, who is the President of one of the premier response organizations in South Florida, Cliff Berry Inc., and a state contractor. His biography is attached.

Cliff Berry thanked Ms. Gordon and the Sanctuary Advisory Council for the invitation to present a contractor's perspective on preparedness in the Florida Keys. He indicated that preparedness is a product of individual vessels and facilities planning in advance for every contingency, including securing coverage with an accredited contractor that has appropriate equipment available around the clock, training employees and maintaining response equipment in a state of readiness. He divided spills into two categories: land-based spills which are primarily vehicular accidents, tanker roll-overs and illegal dumping, and water-based spills which are primarily through grounded vessels, marine fueling operations and mystery spills, for which no party takes responsibility. Mr. Berry elaborated further on the three types of marine spills, for which there are state and federal mandated preparedness levels concerning response time, and in the case of vessels

carrying over 250 barrels of pollutant on board, must have a response plan in order to clean up oil. He observed that most of the larger tankers carrying pollutants offshore contact with one of the two major clean-up groups in the nation: MSRC, mentioned earlier, and the National Response Corps (NRC) that are heavily invested in vessels and equipment but rely on local contractors for trained labor. He posed the rhetorical question “Are the Keys prepared?” and observed that if the local facilities and locally operating transport facilities are doing their due diligence and have equipment pre-positioned and response pre-planned, the Keys will be prepared. He concluded that in the event of a catastrophic spill, the Coast Guard has the ability to draw on resources at a national level to manage the spil..

Chair Neugent thanked Ms. Gordon for assembling such a comprehensive presentation and Mr. Causey thanked individual panelists for their contribution toward reassuring the Council, that in the event of an oil spill, everything possible has been considered.

**Review of the Florida Keys Carrying Capacity Study – Dr. Bill Kruczynski (EPA)**  
Chair Neugent invited Nancy Klingener to preface Dr. Kruczynski’s presentation.

Nancy Klingener raised the issue of having an independent scientific review of the final product of the Army corps/DCA sponsored Florida Keys Carrying Capacity Study, since the scientific review of the interim product has uncovered some serious and fundamental flaws. She suggested that since Dan Basta has experience as a modeler, NOAA play a role in reviewing the study and, in particular, the Marine Module, since that was the section found most problematic by the National Academy of Science panel, as it was by EPA in a review co-authored by Dr. Kruczynski.

Ms. Klingener moved that the Sanctuary Advisory Council ask the Army Corps of Engineers and the Department of Community Affairs to obtain an independent scientific review of the final Florida Keys Carrying Capacity Study.

The motion was seconded by Ms. Harrison, and upon vote, passed unanimously.

Ms. Klingener moved that the Sanctuary Advisory Council ask for NOAA to review the final product of the Florida Keys Carrying Capacity Study, with special attention to the Marine Module.

The motion was seconded by Mr. Blevins, and upon vote, passed unanimously.

Discussion concerning funding followed, with input from DCA.

Dr. Kruczynski noted that his talk was structured towards producing the result that preceded it. He gave an expanded version of the attached report and distributed copies of a paper by Alice Clarke of Florida International University entitle ‘Assessing the Carrying Capacity of the Florida Keys’. He gave the history and philosophy of the development of the term “carrying capacity”, starting with Sir Walter Raleigh in 1650. His main thesis is that it is mathematically impossible to model such a study, given so

much uncertainty, particularly since some of the variables are subject to human choice and ingenuity, which are unquantifiable, although he also detailed more specific shortcomings in this attempt to determine the ability of the Florida Keys ecosystem and the various segments thereof, to withstand all the effects of additional land development activities. He cited an interim review of the Carrying Capacity Analysis Model (CCAM) by the National Academy of Sciences as saying that the expectations in this model development exceed the scientific understanding of the model capabilities, and outlined examples of problems with the data-base and some of the concepts employed in the Marine Module, specifically that the only input into the Marine Module comes from the storm water and wastewater components; that 1990 census data is used in the interim report and not 2000 census data; it uses wrong attribute characteristics for septic tanks, package plant and wastewater treatment plants; it uses mean data for episodic events; it assumes permitting for 30 million gallons a day of drinking water; it ignores canals as waters of the State and as recipients of most of the storm water and sewage in residential areas in the Keys. Dr. Kruczynski observed that the impact of tourism is under-represented, as tourists probably have a multiplier effect, and there is no sensitivity testing in the model to prevent errors from faulty assumptions snowballing. He referred to a 1950s phrase “The solution to pollution is dilution” and concluded by agreeing with Ms. Klingener that since the model is being amended by the contractor to account for some of the earlier criticism, it is important to provide a similar level of review for the final product that is to be handed to the County in June, 2002.

Discussion followed concerning the critical limiting factor of fresh water availability to further development, the exceeding of carrying capacity in terms of loss and fragmentation of terrestrial habitat, direct increased pressure of human populations on fish populations, the disproportionate ratio of tourists to locals on any given day in the Keys and the usefulness of the study as an Impact Assessment Tool in comparing scenarios.

In concluding remarks, Mr. Causey expressed frustration at not being able to use the study as a management tool within the Sanctuary, despite the GIS data set. Mr. Moe worried that it would be used manipulatively. Mr. Hunt recognized that there is a state mandate to use the study and that there is a need for review by an independent group to point out the strengths and weaknesses in the study. Dr. Kruczynski noted that the compilation of a large GIS based data set on the Keys is a good component. Rebecca Jetton of the Department of Community Affairs said that although there are weaknesses in the model, that it has internal flexibility and is ground-breaking in the State of Florida, and can be improved on, despite the lack of budgeted funds for a further review.

Chair Neugent scheduled the subject for further review at a future meeting.

The meeting was adjourned at 5:19 p.m.

Submitted by,

Fiona Wilmot

